

Amendments to the Claims:

1-17. (CANCELLED)

18. (CURRENTLY AMENDED) A headset to be worn by a user for communication with a device, the headset comprising:

a microphone for capturing receiving audio signals;

speech processing circuitry configured for forming sampled representations of the captured audio signals and analyzing the sampled representations of the audio signals to detect if the sampled representations include user speech as opposed to extraneous noise;

circuitry configured for to selectively transmitting the sampled representations of the audio signals to the device when user speech rather than noise is detected and generally to not transmitting to the device when user speech is not detected.

19. (ORIGINAL) The headset of claim 18 wherein the processing circuitry includes digitization circuitry for forming a digitized representation of the audio signal.

20. (ORIGINAL) The headset of claim 18 wherein the processing circuitry comprises audio filters configured for creating a sampled spectral representation of the audio signals.

21. (CURRENTLY AMENDED) The headset of claim 20 48 wherein the filters produce frames associated with spectral components of the signal representation, the headset configured for transmitting the signal frames.

22. (ORIGINAL) The headset of claim 20 wherein the filters include Mel scale filters for generating signal frames reflective of a set of filter values.

23. (CURRENTLY AMENDED) The headset of claim 18 wherein the speech processing circuitry comprises speech detection circuitry for analyzing the signal representations to detect speech, the speech detection circuitry configured for selectively controlling transmission of the sampled representations to the device.

24. (CURRENTLY AMENDED) The headset of claim 18 further comprising a second microphone, the first and second microphones configured to generate signals with the first microphone configured to detect a greater proportion of speech sounds of a user than the second microphone;

the processing circuitry configured to process signals generated by the first and second microphones to determine if the user is speaking as opposed to extraneous noise.

25. (ORIGINAL) The headset of claim 18 further comprising speech recognition circuitry.

26. (ORIGINAL) The headset of claim 18 wherein the device is a portable terminal.

27. (ORIGINAL) The headset of claim 18 wherein the device is a computer.

28. (CANCELLED)

29. (CURRENTLY AMENDED) A system for wireless communications comprising:

a device configured for processing speech signals;

a headset for capturing audio signals to be processed, the headset configured for initially forming sampled representations of the captured audio signals and processing the sampled representations of the captured signals using speech detection circuitry to determine that the audio signals include user speech as opposed to extraneous noise;

the headset further operable to ~~and for~~ selectively wirelessly transmitting, to the device, sampled representations of the captured audio signals when user speech rather than noise is detected and to not transmit

to the device when ~~based on the determination that user speech is~~ not detected.

30. (CURRENTLY AMENDED) The system of claim 29 wherein the headset comprises a microphone for ~~receiving~~ capturing the audio signals.

31. (ORIGINAL) The system of claim 29 wherein the headset comprises circuitry configured for forming a digitized representation of the audio signals and for analyzing the digitized representation to detect if the audio signals represent user speech.

32. (ORIGINAL) The system of claim 31 wherein the headset comprises circuitry for creating signal frames associated with spectral components of the digitized representation, the headset configured for transmitting the signal frames.

33. (CURRENTLY AMENDED) The system of claim 32 wherein the headset includes Mel scale filters for generating signal frames reflective of a set of filter values.

34. (CANCELLED)

35. (ORIGINAL) The system of claim 29 wherein the device comprises speech recognition circuitry for processing transmitted sampled representations from the headset to recognize speech patterns in the transmitted signals.

36. (ORIGINAL) The system of claim 29 wherein the headset comprises speech recognition circuitry configured for performing speech recognition on the sampled representations prior to transmission to the device.

37. (ORIGINAL) The system claim 29 wherein the headset is configured for forming sampled spectral representations of the captured audio signals.

38. (ORIGINAL) The system of claim 37 wherein the headset is configured for transmitting the sampled spectral representations to the device

39. (ORIGINAL) The system of claim 29 wherein the device is a portable terminal.

40. (ORIGINAL) The system of claim 29 wherein the device is a computer.

41. (CURRENTLY AMENDED) The system of claim 29 further comprising a second microphone, the first and second microphones configured to generate signals with the first microphone detecting a greater proportion of speech sounds of a user than the second microphone;

the headset configured to process signals generated by the first and second microphones to detect speech of the user as opposed to extraneous noise.

42. (ORIGINAL) The system of claim 29 further comprising speech recognition circuitry configured for performing speech recognition on the sampled representations.

43. (ORIGINAL) The system of claim 42 wherein the speech recognition circuitry comprises codebook lookup circuitry.

44. (ORIGINAL) The system of claim 42 wherein the speech recognition circuitry further comprises pattern matching circuitry.

45. (CURRENTLY AMENDED) A method for wireless communication between a headset and device, the method comprising:
capturing audio signals with a headset;

processing the captured audio signals and forming sampled representations of the audio signals at the headset and using speech detection circuitry to analyze the sampled representations to determine if the audio signals include user speech as opposed to extraneous noise;

selectively transmitting sampled representations of the captured audio signals to the device when user speech rather than noise is detected and not transmitting to the device when based on the determination that user speech is not detected.

46. (ORIGINAL) The method of claim 45 further comprising performing speech recognition processing on the audio signals at the headset.

47. (ORIGINAL) The method of claim 45 further comprising performing speech recognition processing on the audio signals at the device.

48. (ORIGINAL) The method of claim 45 further comprising forming signal frames as the sampled representations and transmitting the signal frames.

49. (ORIGINAL) The method of claim 48 further comprising using Mel scale filters at the headset for generating the signal frames.

50. (ORIGINAL) The method of claim 45 further comprising processing the audio signals to form sampled spectral representations of the audio signals.

51. (ORIGINAL) The method of claim 45 wherein the device is a portable terminal.

52. (ORIGINAL) The method of claim 45 wherein the device is a computer.

53. (ORIGINAL) The method of claim 45 further comprising receiving audio signals with a microphone in the headset.

54. (CURRENTLY AMENDED) The method of claim 53 further comprising capturing ~~receiving~~ audio signals with a second microphone positioned in the headset, the first microphone detecting a greater proportion of speech sounds of a user than the second microphone; processing the signals generated by the first and second microphones to determine if the user is speaking as opposed to extraneous noise being captured.

55. (ORIGINAL) The method of claim 45 further comprising performing a spectral transformation of the sampled representations for speech recognition analysis.

56. (ORIGINAL) The method of claim 55 further comprising using the spectral transformation to operate codebook lookup circuitry and to output codebook values.

57. (ORIGINAL) The method of claim 56 further comprising performing pattern matching processing with the codebook values.

58. (CURRENTLY AMENDED) A headset for communication with a remote device, the headset comprising:

a microphone system configured to capture audio signals including user speech; and

circuitry responsive to the output of said microphone system to form a sampled spectral transform of the captured audio signals in order to detect user speech and configured to reduce the amount of microphone system output data that is communicated to said remote device based on user speech detection;

the circuitry configured to selectively transmit the spectral transform of the audio signals to the device when user speech is detected as

opposed to extraneous noise and to not transmit to the device when user speech is not detected.

59-64. (CANCELLED)

65. (ORIGINAL) The headset of claim 58 wherein said headset communicates with said remote device wirelessly.

66-68. (CANCELLED)

69. (CURRENTLY AMENDED) The headset of claim 58 wherein said headset includes at least two microphones positioned at different distances from the user's mouth and circuitry responsive to the outputs of said microphones and configured to process said outputs to discriminate user speech from extraneous noise ~~audio signals~~.

70-84. (CANCELLED)